

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
12 May 2005 (12.05.2005)

PCT

(10) International Publication Number
WO 2005/042016 A3

(51) International Patent Classification⁷: **C07K 14/195**,
14/245, A61K 39/39, 39/02, G01N 33/483

(21) International Application Number:
PCT/US2004/035039

(22) International Filing Date: 22 October 2004 (22.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/514,307 23 October 2003 (23.10.2003) US
60/561,999 13 April 2004 (13.04.2004) US

(71) Applicant (for all designated States except US): **CHIRON CORPORATION** [US/US]; 4560 Horton Street, Emeryville, CA 94608 (US).

(71) Applicants and

(72) Inventors: **MAGAGNOLI, Claudia** [IT/IT]; Via Fiorentina 1, I-53100 Siena (IT). **MORANDI, Maurizio** [IT/IT]; Via Fiorentina 1, I-53100 Siena (IT).

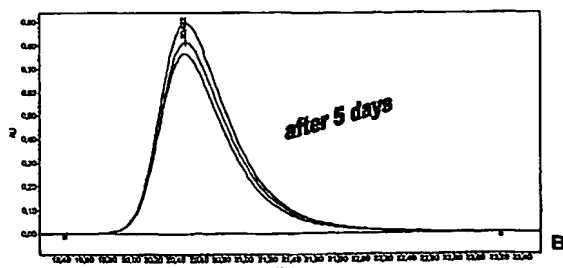
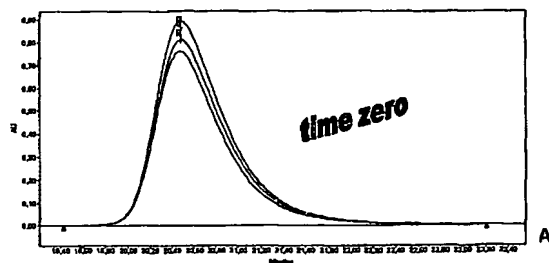
(74) Agents: **HALE, Rebecca** et al.; Chiron Corporation, Intellectual Property - R440, P. O. Box 8097, Emeryville, CA 94662-8097 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: STABILISED COMPOSITIONS

SampleName	Inj. Volume	Channel	Dilution
1 K63 in PBS	100,00	214nm	4,00
2 K63 in Chaps 0,25%	100,00	214nm	4,00
3 K63 in citrate	100,00	214nm	4,00



(57) Abstract: This invention relates to the stabilization of a bacterial ADP-ribosylating exotoxin class protein (bARE), a method for analysing a bARE class protein, a method for the stabilization of the bARE class bacterial protein, compositions comprising a stabilized bARE protein, compositions comprising a substantially integral bARE class protein and immunogenic composition formulations incorporating same.



(84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) **Date of publication of the international search report:**
30 June 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.